

DEPARTMENT OF COMMERCE
BUREAU OF THE CENSUS

SAM. L. ROGERS, DIRECTOR
RESIGNED APRIL 13, 1921

W. M. STEUART, DIRECTOR
APPOINTED APRIL 14, 1921

FOURTEENTH CENSUS OF THE UNITED STATES
TAKEN IN THE YEAR 1920

VOLUME IX

MANUFACTURES

1919

REPORTS FOR STATES, WITH STATISTICS FOR
PRINCIPAL CITIES

PREPARED UNDER THE SUPERVISION OF EUGENE F. HARTLEY
CHIEF STATISTICIAN FOR MANUFACTURES



WASHINGTON
GOVERNMENT PRINTING OFFICE
1923

*Bureau of the Census
Library*

REPORTS OF THE FOURTEENTH CENSUS.

POPULATION:

- Volume I.—NUMBER AND DISTRIBUTION OF INHABITANTS.
- Volume II.—GENERAL REPORT AND ANALYTICAL TABLES.
- Volume III.—COMPOSITION AND CHARACTERISTICS OF THE POPULATION, BY STATES.
- Volume IV.—OCCUPATIONS.

AGRICULTURE:

- Volume V.—GENERAL REPORT AND ANALYTICAL TABLES.
- Volume VI.—REPORTS FOR STATES, WITH STATISTICS FOR COUNTIES.
 - Part 1.—THE NORTHERN STATES.
 - Part 2.—THE SOUTHERN STATES.
 - Part 3.—THE WESTERN STATES AND THE OUTLYING POSSESSIONS.
- Volume VII.—IRRIGATION AND DRAINAGE—GENERAL REPORT AND ANALYTICAL TABLES, AND REPORTS FOR STATES, WITH STATISTICS FOR COUNTIES.

MANUFACTURES:

- Volume VIII.—GENERAL REPORT AND ANALYTICAL TABLES.
- Volume IX.—REPORTS FOR STATES, WITH STATISTICS FOR PRINCIPAL CITIES.
- Volume X.—REPORTS FOR SELECTED INDUSTRIES.

MINING:

- Volume XI.—MINES AND QUARRIES—GENERAL REPORT AND ANALYTICAL TABLES, AND REPORTS FOR STATES AND SELECTED INDUSTRIES.

ABSTRACT OF THE FOURTEENTH CENSUS.
ABSTRACT OF THE CENSUS OF MANUFACTURES.

LETTER OF TRANSMITTAL.

DEPARTMENT OF COMMERCE,
BUREAU OF THE CENSUS,
Washington, D. C., May 1, 1922.

SIR:

I transmit herewith Volume IX of the Reports of the Fourteenth Decennial Census, relating to manufactures. The statistics were collected during the year 1920, but relate in general to the year ending December 31, 1919.

The report on manufactures consists of three volumes and an Abstract of Manufactures. Volume VIII contains a summarization of the statistics of manufactures as a whole, for the separate industries and for the states, counties, and principal cities. Volume IX, the present volume, contains a separate report on the manufactures of each state and Alaska, Hawaii, and Porto Rico, with special statistics for the leading industries in the state and territory, each report having been previously issued as a bulletin. Volume X contains special reports relating to the leading industries of the United States, which were also published as a series of bulletins.

The collection and compilation of the statistics and the preparation of the text were under the supervision of Eugene F. Hartley, chief statistician for manufactures, assisted by John F. Daly, William A. Ruff, William W. Sawyer, chiefs of divisions, Frank L. Sanford and Story B. Ladd, expert special agents, and Lucy Craycroft, statistical expert.

Respectfully,

W. M. STEUART,
Director of the Census.

Hon. HERBERT HOOVER,
Secretary of Commerce.

CONTENTS.

	Page.		Page.
INTRODUCTION.....	15	EXPLANATION OF TERMS—Continued.....	
EXPLANATION OF TERMS:		Materials.....	17
Scope of census.....	15	Rent and taxes.....	17
Period covered.....	15	Value of products.....	17
The establishment.....	15	Value added by manufacture.....	17
Classification by industries.....	15	Cost of manufacture and profits.....	17
Selected industries.....	16	Primary horsepower.....	17
Comparisons with previous censuses.....	16	Fuel.....	17
Influence of increased prices.....	16	Location of establishments.....	18
Persons engaged in the industry.....	16	Laundries.....	18
Salaries and wages.....	16	Custom sawmills and gristmills.....	18
Prevailing hours of labor.....	17	INDEX OF CITIES.....	1695
Capital.....	17		

STATES AND OUTLYING POSSESSIONS.

STATES.	Page.		Page.		Page.
Alabama.....	21	Maryland.....	557	Pennsylvania.....	1261
Arizona.....	47	Massachusetts.....	587	Rhode Island.....	1351
Arkansas.....	61	Michigan.....	669	South Carolina.....	1381
California.....	81	Minnesota.....	717	South Dakota.....	1401
Colorado.....	141	Mississippi.....	755	Tennessee.....	1415
Connecticut.....	167	Missouri.....	775	Texas.....	1447
Delaware.....	211	Montana.....	817	Utah.....	1485
District of Columbia.....	229	Nebraska.....	833	Vermont.....	1503
Florida.....	241	Nevada.....	857	Virginia.....	1521
Georgia.....	263	New Hampshire.....	867	Washington.....	1551
Idaho.....	295	New Jersey.....	889	West Virginia.....	1585
Illinois.....	309	New Mexico.....	959	Wisconsin.....	1609
Indiana.....	373	New York.....	969	Wyoming.....	1653
Iowa.....	417	North Carolina.....	1101		
Kansas.....	449	North Dakota.....	1125	OUTLYING POSSESSIONS.	
Kentucky.....	479	Ohio.....	1139	Alaska.....	1665
Louisiana.....	507	Oklahoma.....	1213	Hawaii.....	1669
Maine.....	531	Oregon.....	1235	Porto Rico.....	1683

DETAILED CONTENTS FOR STATES.

ALABAMA.		SPECIAL STATISTICS.	Page.		Page.
GENERAL STATISTICS.	Page.	Cotton goods.....	34	Wage earners, by months.....	50
General character of the state.....	21	Iron and steel.....	34	Wage earners, by months, for selected industries	
Comparative summary.....	22	Blast furnaces.....	34	and for cities.....	51
Statistics for the state, by counties.....	23	Steel works and rolling mills.....	34	Average number of wage earners, by prevailing	
Principal industries, by value of products.....	24	Lumber and timber products.....	35	hours of labor per week, for selected industries	
Persons engaged in manufacturing industries.....	24	Fertilizers.....	35	and for cities.....	51
Average number of wage earners for selected indus-		Turpentine and rosin.....	35	Size of establishments, by average number of	
tries, with per cent, by sex and age.....	25	Printing and publishing.....	36	wage earners, for selected industries and for	
Average number of wage earners, by sex and age,		Laundries.....	36	cities.....	52
and value of products for cities of 10,000 inhab-		Dyeing and cleaning.....	36	Size of establishments, by value of products.....	52
itants or more.....	25	Custom sawmills and gristmills.....	37	Size of establishments, by value of products, for	
Wage earners, by months.....	25			selected industries.....	53
Wage earners, by months, for selected industries		GENERAL TABLES.		Size of establishments, by value of products, for	
and for cities.....	26	Comparative summary for selected industries and		cities of 10,000 inhabitants or more.....	53
Average number of wage earners, by prevailing		for cities: 1910, 1914, and 1909.....	38	Character of ownership, for selected industries and	
hours of labor per week, for selected industries		Detailed statement of all industries combined and		for cities.....	54
and for cities.....	27	specified industries: 1919.....	40	Manufactures, by population groups, in cities of	
Size of establishments, by average number of wage				10,000 inhabitants or more.....	54
earners, for selected industries and for cities.....	28	ARIZONA.		Number and horsepower of prime movers.....	55
Size of establishments, by value of products.....	28	GENERAL STATISTICS.		Fuel consumed.....	55
Size of establishments, by value of products, for		General character of the state.....	47		
selected industries.....	29	Comparative summary.....	48	SPECIAL STATISTICS.	
Size of establishments, by value of products, for		Statistics for the state, by counties.....	49	Flour-mill and gristmill products.....	55
cities of 10,000 inhabitants or more.....	30	Principal industries, by value of products.....	49	Printing and publishing.....	56
Character of ownership, for selected industries and		Persons engaged in manufacturing industries.....	49	Laundries.....	56
for cities.....	31	Average number of wage earners for selected indus-		Dyeing and cleaning.....	56
Manufactures, by population groups, in cities of		tries, with per cent, by sex and age.....	50		
10,000 inhabitants or more.....	32	Average number of wage earners, by sex and age,		GENERAL TABLES.	
Principal industries in cities of 50,000 inhabit-		and value of products for cities of 10,000 inhab-		Comparative summary for selected industries	
ants or more, with per cent of total for state.....	32	itants or more.....	50	and for cities: 1910, 1914, and 1909.....	57
Number and horsepower of prime movers.....	33			Detailed statement of all industries combined and	
Fuel consumed.....	33			specified industries: 1919.....	58

MANUFACTURES.

ARKANSAS.

GENERAL STATISTICS.

	Page.
General character of the state.....	61
Comparative summary.....	62
Statistics for the state, by counties.....	63
Principal industries, by value of products.....	64
Persons engaged in manufacturing industries.....	64
Average number of wage earners for selected industries, with per cent, by sex and age.....	65
Average number of wage earners, by sex and age, and value of products for cities of 10,000 inhabitants or more.....	65
Wage earners, by months.....	65
Wage earners, by months, for selected industries and for cities.....	66
Average number of wage earners, by prevailing hours of labor per week, for selected industries and for cities.....	67
Size of establishments, by average number of wage earners, for selected industries and for cities.....	68
Size of establishments, by value of products.....	68
Size of establishments, by value of products, for selected industries.....	69
Size of establishments, by value of products, for cities of 10,000 inhabitants or more.....	70
Character of ownership, for selected industries and for cities.....	70
Manufactures, by population groups, in cities of 10,000 inhabitants or more.....	71
Principal industries in Little Rock, with per cent of total for state.....	71
Number and horsepower of prime movers.....	72
Fuel consumed.....	72

SPECIAL STATISTICS.

Lumber and timber products.....	73
Rice, cleaning and polishing.....	73
Flour-mill and gristmill products.....	73
Printing and publishing.....	74
Laundries.....	74
Dyeing and cleaning.....	74
Custom sawmills and gristmills.....	74

GENERAL TABLES.

Comparative summary for selected industries and for cities: 1919, 1914, and 1909.....	75
Detailed statement of all industries combined and specified industries: 1919.....	76

CALIFORNIA.

GENERAL STATISTICS.

General character of the state.....	81
Comparative summary.....	82
Statistics for the state, by counties.....	83
Principal industries, by value of products.....	84
Persons engaged in manufacturing industries.....	85
Average number of wage earners for selected industries, with per cent, by sex and age.....	85
Average number of wage earners, by sex and age, and value of products for cities of 10,000 inhabitants or more.....	86
Wage earners, by months.....	86
Wage earners, by months, for selected industries and for cities.....	86
Average number of wage earners, by prevailing hours of labor per week, for selected industries and for cities.....	88
Size of establishments, by average number of wage earners, for selected industries and for cities.....	90
Size of establishments, by value of products.....	91
Size of establishments, by value of products, for selected industries.....	92
Size of establishments, by value of products, for cities of 10,000 inhabitants or more.....	94
Character of ownership, for selected industries and for cities.....	95
Manufactures, by population groups, in cities of 10,000 inhabitants or more.....	96
Principal industries in cities of 50,000 inhabitants or more, with per cent of total for state.....	97
Number and horsepower of prime movers.....	98
Fuel consumed.....	98

SPECIAL STATISTICS.

Petroleum, refining.....	99
Canning and preserving.....	99
Shipbuilding, including boat building.....	100
Slaughtering and meat packing.....	101
Flour-mill and gristmill products.....	102
Butter, cheese, and condensed milk.....	102
Lumber and timber products.....	102
Printing and publishing.....	102
Beet sugar.....	103
Leather, tanned, curried, and finished.....	104
Rice, cleaning and polishing.....	104
Power laundries.....	104
Dyeing and cleaning.....	104
Custom gristmills.....	105

GENERAL TABLES.

Comparative summary for selected industries and for cities: 1919, 1914, and 1909.....	106
Detailed statement of all industries combined and specified industries: 1919.....	112

COLORADO.

GENERAL STATISTICS.

	Page.
General character of the state.....	141
Comparative summary.....	142
Statistics for the state, by counties.....	143
Principal industries, by value of products.....	144
Persons engaged in manufacturing industries.....	144
Average number of wage earners for selected industries, with per cent, by sex and age.....	145
Average number of wage earners, by sex and age, and value of products, for cities of 10,000 inhabitants or more.....	145
Wage earners, by months.....	145
Wage earners, by months, for selected industries and for cities.....	146
Average number of wage earners, by prevailing hours of labor per week, for selected industries and for cities.....	147
Size of establishments, by average number of wage earners, for selected industries and for cities.....	148
Size of establishments, by value of products.....	148
Size of establishments, by value of products, for selected industries.....	149
Size of establishments, by value of products, for cities of 10,000 inhabitants or more.....	150
Character of ownership, for selected industries and for cities.....	150
Manufactures, by population groups, in cities of 10,000 inhabitants or more.....	151
Principal industries in Denver, with per cent of total for state.....	151
Number and horsepower of prime movers.....	152
Fuel consumed.....	152

SPECIAL STATISTICS.

Slaughtering and meat packing.....	153
Flour-mill and gristmill products.....	153
Butter, cheese, and condensed milk.....	154
Printing and publishing.....	154
Laundries.....	154
Dyeing and cleaning.....	154
Custom sawmills and gristmills.....	155

GENERAL TABLES.

Comparative summary for selected industries and for cities: 1919, 1914, and 1909.....	156
Detailed statement of all industries combined and specified industries: 1919.....	158

CONNECTICUT.

GENERAL STATISTICS.

General character of the state.....	167
Comparative summary.....	168
Statistics for the state, by counties.....	169
Principal industries, by value of products.....	169
Persons engaged in manufacturing industries.....	170
Average number of wage earners for selected industries, with per cent, by sex and age.....	170
Average number of wage earners, by sex and age, and value of products for cities of 10,000 inhabitants or more.....	171
Wage earners, by months.....	171
Wage earners, by months, for selected industries and for cities.....	172
Average number of wage earners, by prevailing hours of labor per week, for selected industries and for cities.....	174
Size of establishments, by average number of wage earners, for selected industries and for cities.....	175
Size of establishments, by value of products.....	176
Size of establishments, by value of products, for selected industries.....	177
Size of establishments, by value of products, for cities of 10,000 inhabitants or more.....	179
Character of ownership, for selected industries and for cities.....	180
Manufactures, by population groups, in cities of 10,000 inhabitants or more.....	181
Principal industries in cities of 50,000 inhabitants or more, with per cent of total for state.....	182
Number and horsepower of prime movers.....	183
Fuel consumed.....	183

SPECIAL STATISTICS.

Textiles.....	184
Cotton manufactures.....	184
Silk goods.....	185
Wool manufactures.....	186
Knit goods.....	187
Hats, fur-felt.....	187
Machinery used in textile mills.....	188
Electrical machinery, apparatus, and supplies.....	188
Paper and wood pulp.....	188
Printing and publishing.....	188
Laundries.....	188
Dyeing and cleaning.....	189
Custom sawmills and gristmills.....	189

GENERAL TABLES.

Comparative summary for selected industries and for cities: 1919, 1914, and 1909.....	190
Detailed statement of all industries combined and specified industries: 1919.....	194

DELAWARE.

GENERAL STATISTICS.

	Page.
General character of the state.....	211
Comparative summary.....	212
Statistics for the state, by counties.....	213
Principal industries, by value of products.....	213
Persons engaged in manufacturing industries.....	213
Average number of wage earners for selected industries, with per cent, by sex and age.....	214
Average number of wage earners, by sex and age, and value of products for Wilmington.....	214
Wage earners, by months.....	214
Wage earners, by months, for selected industries and Wilmington.....	214
Average number of wage earners, by prevailing hours of labor per week, for selected industries and for Wilmington.....	215
Size of establishments, by average number of wage earners, for selected industries and Wilmington.....	216
Size of establishments, by value of products.....	216
Size of establishments, by value of products, for selected industries.....	217
Size of establishments, by value of products, for Wilmington.....	217
Character of ownership, for selected industries and Wilmington.....	218
Manufactures in cities of 10,000 inhabitants or more.....	218
Principal industries in Wilmington, with per cent of total for the state.....	218
Number and horsepower of prime movers.....	219
Fuel consumed.....	219

SPECIAL STATISTICS.

Leather, tanned, curried, and finished.....	219
Canning and preserving.....	219
Flour-mill and gristmill products.....	220
Laundries.....	220
Dyeing and cleaning.....	220
Custom sawmills and gristmills.....	221

GENERAL TABLES.

Comparative summary for selected industries and for Wilmington: 1919, 1914, and 1909.....	222
Detailed statement of all industries combined and specified industries: 1919.....	224

DISTRICT OF COLUMBIA.

GENERAL STATISTICS.

Area and population.....	229
Comparative summary.....	230
Principal industries, by value of products.....	230
Persons engaged in manufacturing industries.....	231
Average number of wage earners for selected industries, with per cent, by sex and age.....	231
Wage earners, by months.....	231
Wage earners, by months, for selected industries.....	232
Average number of wage earners, by prevailing hours of labor per week, for selected industries.....	232
Size of establishments, by average number of wage earners, for selected industries.....	233
Size of establishments, by value of products.....	233
Size of establishments, by value of products, for selected industries.....	234
Character of ownership, for selected industries.....	234
Number and horsepower of prime movers.....	235
Fuel consumed.....	235

SPECIAL STATISTICS.

Laundries.....	235
Dyeing and cleaning.....	235

ESTABLISHMENTS OPERATED BY FEDERAL GOVERNMENT.

Governmental establishments.....	236
Wage earners, by months.....	236
Number and horsepower of prime movers.....	237
Fuel consumed.....	237

GENERAL TABLES.

Comparative summary for selected industries: 1919, 1914, and 1909.....	237
Detailed statement of all industries combined and specified industries: 1919.....	238

FLORIDA.

GENERAL STATISTICS.

General character of the state.....	241
Comparative summary.....	242
Statistics for the state, by counties.....	243
Principal industries, by value of products.....	243
Persons engaged in manufacturing industries.....	244
Average number of wage earners for selected industries, with per cent, by sex and age.....	244
Average number of wage earners, by sex and age, and value of products for cities of 10,000 inhabitants or more.....	244
Wage earners, by months.....	245
Wage earners, by months, for selected industries and for cities.....	245
Average number of wage earners, by prevailing hours of labor per week, for selected industries and for cities.....	246
Size of establishments, by average number of wage earners, for selected industries and for cities.....	247

CONTENTS.

7

	Page.
Size of establishments, by value of products.....	247
Size of establishments, by value of products, for selected industries.....	248
Size of establishments, by value of products, for cities of 10,000 inhabitants or more.....	249
Character of ownership, for selected industries and for cities.....	249
Manufactures, by population groups, in cities of 10,000 inhabitants or more.....	250
Principal industries in cities of 50,000 inhabitants or more, with per cent of total for state.....	251
Number and horsepower of prime movers.....	251
Fuel consumed.....	252

SPECIAL STATISTICS.

Lumber and timber products.....	252
Shipbuilding, including boat building.....	252
Turpentine and rosin.....	253
Fertilizers.....	253
Printing and publishing.....	253
Laundries.....	253
Dyeing and cleaning.....	254
Custom gristmills and sawmills.....	254

GENERAL TABLES.

Comparative summary for selected industries and for cities: 1919, 1914, and 1909.....	255
Detailed statement of all industries combined and specified industries: 1919.....	256

GEORGIA.

GENERAL STATISTICS.

General character of the state.....	263
Comparative summary.....	264
Statistics for the state, by counties.....	265
Principal industries, by value of products.....	267
Persons engaged in manufacturing industries.....	267
Average number of wage earners for selected industries, with per cent, by sex and age.....	268
Average number of wage earners, by sex and age, and value of products for cities of 10,000 inhabitants or more.....	268
Wage earners, by months.....	268
Wage earners, by months, for selected industries and for cities.....	269
Average number of wage earners, by prevailing hours of labor per week, for selected industries and for cities.....	270
Size of establishments, by average number of wage earners, for selected industries and for cities.....	271
Size of establishments, by value of products.....	271
Size of establishments, by value of products, for selected industries.....	272
Size of establishments, by value of products, for cities of 10,000 inhabitants or more.....	273
Character of ownership, for selected industries and for cities.....	274
Manufactures, by population groups, in cities of 10,000 inhabitants or more.....	275
Principal industries in cities of 50,000 inhabitants or more, with per cent of total for state.....	275
Number and horsepower of prime movers.....	276
Fuel consumed.....	276

SPECIAL STATISTICS.

Cotton goods.....	277
Knit goods.....	277
Machinery used in textile mills.....	278
Fertilizers.....	278
Lumber and timber products.....	278
Turpentine and rosin.....	279
Shipbuilding, including boat building.....	279
Flour-mill and gristmill products.....	279
Printing and publishing.....	280
Laundries.....	280
Dyeing and cleaning.....	280
Custom sawmills and gristmills.....	280

GENERAL TABLES.

Comparative summary for selected industries and for cities: 1919, 1914, and 1909.....	282
Detailed statement of all industries combined and specified industries: 1919.....	284

IDAHO.

GENERAL STATISTICS.

General character of the state.....	295
Comparative summary.....	296
Statistics for the state, by counties.....	297
Principal industries, by value of products.....	297
Persons engaged in manufacturing industries.....	298
Average number of wage earners for selected industries, with per cent, by sex and age.....	298
Average number of wage earners, by sex and age, and value of products for cities of 10,000 inhabitants or more.....	298
Wage earners, by months.....	298
Wage earners, by months, for selected industries and for cities.....	299
Average number of wage earners, by prevailing hours of labor per week, for selected industries and for cities.....	299

Size of establishments, by average number of wage earners, for selected industries and for cities.....	300
Size of establishments, by value of products.....	300
Size of establishments, by value of products, for selected industries.....	301
Size of establishments, by value of products, for cities of 10,000 inhabitants or more.....	301
Character of ownership, for selected industries and for cities.....	302
Manufactures, by population groups, in cities of 10,000 inhabitants or more.....	302
Number and horsepower of prime movers.....	303
Fuel consumed.....	303

SPECIAL STATISTICS.

Lumber and timber products.....	303
Flour-mill and gristmill products.....	303
Butter, cheese, and condensed milk.....	304
Printing and publishing.....	304
Laundries.....	304
Dyeing and cleaning.....	304
Custom sawmills and gristmills.....	305

GENERAL TABLES.

Comparative summary for selected industries and for cities: 1919, 1914, and 1909.....	305
Detailed statement of all industries combined and specified industries: 1919.....	306

ILLINOIS.

GENERAL STATISTICS.

General character of the state.....	309
Comparative summary.....	310
Statistics for the state, by counties.....	311
Principal industries, by value of products.....	312
Persons engaged in manufacturing industries.....	313
Average number of wage earners for selected industries, with per cent, by sex and age.....	314
Average number of wage earners, by sex and age, and value of products for cities of 10,000 inhabitants or more.....	315
Wage earners, by months.....	315
Wage earners, by months, for selected industries and for cities.....	316
Average number of wage earners, by prevailing hours of labor per week, for selected industries and for cities.....	319
Size of establishments, by average number of wage earners, for selected industries and for cities.....	322
Size of establishments, by value of products.....	323
Size of establishments, by value of products, for selected industries.....	324
Size of establishments, by value of products, for cities of 10,000 inhabitants or more.....	327
Character of ownership, for selected industries and for cities.....	329
Manufactures, by population groups, in cities of 10,000 inhabitants or more.....	331
Principal industries in cities of 50,000 inhabitants or more, with per cent of total for state.....	332
Number and horsepower of prime movers.....	333
Fuel consumed.....	333

SPECIAL STATISTICS.

Slaughtering and meat packing.....	334
Printing and publishing.....	335
Blast furnaces.....	336
Steel works and rolling mills.....	336
Agricultural implements.....	336
Electrical machinery, apparatus, and supplies.....	337
Flour-mill and gristmill products.....	337
Petroleum, refining.....	337
Leather, tanned, curried, and finished.....	338
Butter, cheese, and condensed milk.....	338
Paints and varnishes.....	339
Engines, steam, gas, and water.....	339
Druggists' preparations, patent medicines and compounds, and perfumery and cosmetics.....	340
Soap.....	340
Boots and shoes.....	341
Musical instruments, pianos and organs, and materials.....	341
Chemicals.....	342
Laundries.....	342
Dyeing and cleaning.....	342
Custom sawmills and gristmills.....	342

GENERAL TABLES.

Comparative summary for selected industries and for cities: 1919, 1914, and 1909.....	343
Detailed statement of all industries combined and specified industries: 1919.....	348

INDIANA.

GENERAL STATISTICS.

General character of the state.....	373
Comparative summary.....	374
Statistics for the state, by counties.....	375
Principal industries, by value of products.....	376

Persons engaged in manufacturing industries.....	377
Average number of wage earners for selected industries, with per cent, by sex and age.....	377
Average number of wage earners, by sex and age, and value of products for cities of 10,000 inhabitants or more.....	378
Wage earners, by months.....	378
Wage earners, by months, for selected industries and for cities.....	378
Average number of wage earners, by prevailing hours of labor per week, for selected industries and for cities.....	380
Size of establishments, by average number of wage earners, for selected industries and for cities.....	382
Size of establishments, by value of products.....	383
Size of establishments, by value of products, for selected industries.....	384
Size of establishments, by value of products, for cities of 10,000 inhabitants or more.....	385
Character of ownership, for selected industries and for cities.....	386
Manufactures, by population groups, in cities of 10,000 inhabitants or more.....	388
Principal industries in cities of 50,000 inhabitants or more, with per cent of total for state.....	389
Number and horsepower of prime movers.....	390
Fuel consumed.....	390

SPECIAL STATISTICS.

Iron and steel, blast furnaces and steel works and rolling mills.....	391
Slaughtering and meat packing.....	391
Automobiles, including bodies and parts.....	392
Flour-mill and gristmill products.....	392
Agricultural implements.....	393
Glass.....	393
Butter, cheese, and condensed milk.....	393
Printing and publishing.....	393
Canning and preserving.....	394
Lumber and timber products.....	394
Laundries.....	394
Dyeing and cleaning.....	394
Custom sawmills and gristmills.....	395

GENERAL TABLES.

Comparative summary for selected industries and for cities: 1919, 1914, and 1909.....	396
Detailed statement of all industries combined and specified industries: 1919.....	400

IOWA.

GENERAL STATISTICS.

General character of the state.....	417
Comparative summary.....	418
Statistics for the state, by counties.....	419
Principal industries, by value of products.....	420
Persons engaged in manufacturing industries.....	421
Average number of wage earners for selected industries, with per cent, by sex and age.....	421
Average number of wage earners, by sex and age, and value of products for cities of 10,000 inhabitants or more.....	422
Wage earners, by months.....	422
Wage earners, by months, for selected industries and for cities.....	422
Average number of wage earners, by prevailing hours of labor per week, for selected industries and for cities.....	424
Size of establishments, by average number of wage earners, for selected industries and for cities.....	425
Size of establishments, by value of products.....	426
Size of establishments, by value of products, for selected industries.....	427
Size of establishments, by value of products, for cities of 10,000 inhabitants or more.....	428
Character of ownership, for selected industries and for cities.....	429
Manufactures, by population groups, in cities of 10,000 inhabitants or more.....	430
Principal industries in cities having 50,000 inhabitants or more, with per cent of total for state.....	431
Number and horsepower of prime movers.....	431
Fuel consumed.....	432

SPECIAL STATISTICS.

Slaughtering and meat packing.....	432
Butter, cheese, and condensed milk.....	433
Flour-mill and gristmill products.....	433
Printing and publishing.....	434
Agricultural implements.....	434
Laundries.....	434
Dyeing and cleaning.....	434
Custom sawmills and gristmills.....	435

GENERAL TABLES.

Comparative summary for selected industries and for cities: 1919, 1914, and 1909.....	435
Detailed statement of all industries combined and specified industries: 1919.....	438

KANSAS.

GENERAL STATISTICS.

General character of the state.....	449
Comparative summary.....	450
Statistics for the state, by counties.....	451

MANUFACTURES.

KANSAS—Continued.

GENERAL STATISTICS—continued.

	Page.
Principal industries, by value of products.....	452
Persons engaged in manufacturing industries.....	452
Average number of wage earners for selected industries, with per cent, by sex and age.....	453
Average number of wage earners, by sex and age, and value of products for cities of 10,000 inhabitants or more.....	453
Wage earners, by months.....	454
Wage earners, by months, for selected industries and for cities.....	454
Average number of wage earners, by prevailing hours of labor per week, for selected industries and for cities.....	455
Size of establishments, by average number of wage earners, for selected industries and for cities.....	457
Size of establishments, by value of products.....	457
Size of establishments, by value of products, for selected industries.....	458
Size of establishments, by value of products, for cities of 10,000 inhabitants or more.....	459
Character of ownership, for selected industries and for cities.....	460
Manufactures, by population groups, in cities of 10,000 inhabitants or more.....	461
Principal industries in cities of 50,000 inhabitants or more, with per cent of total for state.....	461
Number and horsepower of prime movers.....	462
Fuel consumed.....	462

SPECIAL STATISTICS.

Slaughtering and meat packing.....	463
Flour-mill and gristmill products.....	463
Butter, cheese, and condensed milk.....	464
Petroleum, refining.....	464
Printing and publishing.....	465
Ice, manufactured.....	465
Laundries.....	465
Dyeing and cleaning.....	466
Custom sawmills and gristmills.....	466

GENERAL TABLES.

Comparative summary for selected industries and for cities: 1919, 1914, and 1909.....	467
Detailed statement of all industries combined and specified industries: 1919.....	470

KENTUCKY.

GENERAL STATISTICS.

General character of the state.....	479
Comparative summary.....	480
Statistics for the state, by counties.....	481
Principal industries, by value of products.....	482
Persons engaged in manufacturing industries.....	483
Average number of wage earners for selected industries, with per cent, by sex and age.....	483
Average number of wage earners, by sex and age, and value of products for cities of 10,000 inhabitants or more.....	484
Wage earners, by months.....	484
Wage earners, by months, for selected industries and for cities.....	484
Average number of wage earners, by prevailing hours of labor per week, for selected industries and for cities.....	485
Size of establishments, by average number of wage earners, for selected industries and for cities.....	487
Size of establishments, by value of products.....	487
Size of establishments, by value of products, for selected industries.....	488
Size of establishments, by value of products, for cities of 10,000 inhabitants or more.....	489
Character of ownership, for selected industries and for cities.....	490
Manufactures, by population groups, in cities of 10,000 inhabitants or more.....	491
Principal industries in cities of 50,000 inhabitants or more, with per cent of total for state.....	491
Number and horsepower of prime movers.....	492
Fuel consumed.....	492

SPECIAL STATISTICS.

Flour-mill and gristmill products.....	493
Lumber and timber products.....	493
Blast furnaces.....	493
Steel works and rolling mills.....	493
Slaughtering and meat packing.....	493
Printing and publishing.....	494
Leather, tanned, curried, and finished.....	494
Laundries.....	495
Dyeing and cleaning.....	495
Custom sawmills and gristmills.....	495

GENERAL TABLES.

Comparative summary for selected industries and for cities: 1919, 1914, and 1909.....	496
Detailed statement of all industries combined and specified industries: 1919.....	498

LOUISIANA.

GENERAL STATISTICS.

General character of the state.....	507
Comparative summary.....	508
Statistics for the state, by parishes.....	509

	Page.
Principal industries, by value of products.....	510
Persons engaged in manufacturing industries.....	510
Average number of wage earners for selected industries, with per cent, by sex and age.....	511
Average number of wage earners, by sex and age, and value of products for cities of 10,000 inhabitants or more.....	511
Wage earners, by months.....	511
Wage earners, by months, for selected industries and for cities.....	512
Average number of wage earners, by prevailing hours of labor per week, for selected industries and for cities.....	513
Size of establishments, by average number of wage earners, for selected industries and for cities.....	514
Size of establishments, by value of products.....	514
Size of establishments, by value of products, for selected industries.....	515
Size of establishments, by value of products, for cities of 10,000 inhabitants or more.....	516
Character of ownership, for selected industries and for cities.....	516
Manufactures, by population groups, in cities of 10,000 inhabitants or more.....	517
Principal industries in New Orleans, with per cent of total for state.....	517
Number and horsepower of prime movers.....	518
Fuel consumed.....	518

SPECIAL STATISTICS.

Sugar, including refining.....	519
Lumber and timber products.....	519
Petroleum, refining.....	519
Rice, cleaning and polishing.....	520
Purpentine and rosin.....	520
Printing and publishing.....	520
Ice, manufactured.....	521
Laundries.....	521
Dyeing and cleaning.....	521
Custom sawmills and gristmills.....	521

GENERAL TABLES.

Comparative summary for selected industries and for cities: 1919, 1914, and 1909.....	522
Detailed statement of all industries combined and specified industries: 1919.....	524

MAINE.

GENERAL STATISTICS.

General character of the state.....	531
Comparative summary.....	532
Statistics for the state, by counties.....	532
Principal industries, by value of products.....	533
Persons engaged in manufacturing industries.....	533
Average number of wage earners for selected industries, with per cent, by sex and age.....	534
Average number of wage earners, by sex and age, and value of products for cities of 10,000 inhabitants or more.....	534
Wage earners, by months.....	534
Wage earners, by months, for selected industries and for cities.....	535
Average number of wage earners, by prevailing hours of labor per week, for selected industries and for cities.....	536
Size of establishments, by average number of wage earners, for selected industries and for cities.....	537
Size of establishments, by value of products.....	537
Size of establishments, by value of products, for selected industries.....	538
Size of establishments, by value of products, for cities of 10,000 inhabitants or more.....	539
Character of ownership, for selected industries and for cities.....	539
Manufactures, by population groups, in cities of 10,000 inhabitants or more.....	540
Principal industries in Portland, with per cent of total for state.....	541
Number and horsepower of prime movers.....	541
Fuel consumed.....	542

SPECIAL STATISTICS.

Cotton goods.....	542
Woolen and worsted goods.....	543
Machinery used in textile mills.....	544
Paper and wood pulp.....	544
Boots and shoes.....	545
Lumber and timber products.....	545
Canning and preserving.....	545
Printing and publishing.....	546
Laundries.....	546
Dyeing and cleaning.....	546
Custom sawmills and gristmills.....	547

GENERAL TABLES.

Comparative summary for selected industries and for cities: 1919, 1914, and 1909.....	548
Detailed statement of all industries combined and specified industries: 1919.....	550

MARYLAND.

GENERAL STATISTICS.

General character of the state.....	557
Comparative summary.....	559
Statistics for the state, by counties.....	559
Principal industries, by value of products.....	560

	Page.
Persons engaged in manufacturing industries.....	560
Average number of wage earners for selected industries, with per cent, by sex and age.....	561
Average number of wage earners, by sex and age, and value of products for cities of 10,000 inhabitants or more.....	561
Wage earners, by months.....	562
Wage earners, by months, for selected industries and for cities.....	562
Average number of wage earners, by prevailing hours of labor per week, for selected industries and for cities.....	563
Size of establishments, by average number of wage earners, for selected industries and for cities.....	564
Size of establishments, by value of products.....	565
Size of establishments, by value of products, for selected industries.....	565
Size of establishments, by value of products, for cities of 10,000 inhabitants or more.....	567
Character of ownership, for selected industries and for cities.....	567
Manufactures, by population groups, in cities of 10,000 inhabitants or more.....	568
Principal industries in Baltimore, with per cent of total for state.....	568
Number and horsepower of prime movers.....	569
Fuel consumed.....	569

SPECIAL STATISTICS.

Shipbuilding, including boat building.....	570
Slaughtering and meat packing.....	570
Fertilizers.....	571
Canning and preserving.....	571
Flour-mill and gristmill products.....	571
Cotton goods.....	572
Printing and publishing.....	572
Laundries.....	572
Dyeing and cleaning.....	573
Custom gristmills and sawmills.....	573

GENERAL TABLES.

Comparative summary for selected industries and for cities: 1919, 1914, and 1909.....	574
Detailed statement of all industries combined and specified industries: 1919.....	576

MASSACHUSETTS.

GENERAL STATISTICS.

General character of the state.....	587
Comparative summary.....	588
Statistics for the state, by counties.....	589
Principal industries, by value of products.....	589
Persons engaged in manufacturing industries.....	590
Average number of wage earners for selected industries, with per cent, by sex and age.....	591
Average number of wage earners, by sex and age, and value of products for cities of 10,000 inhabitants or more.....	592
Wage earners, by months.....	592
Wage earners, by months, for selected industries and for cities.....	593
Average number of wage earners, by prevailing hours of labor per week, for selected industries and for cities.....	597
Size of establishments, by average number of wage earners, for selected industries and for cities.....	601
Size of establishments, by value of products.....	602
Size of establishments, by value of products, for selected industries.....	603
Size of establishments, by value of products, for cities of 10,000 inhabitants or more.....	606
Character of ownership, for selected industries and for cities.....	609
Manufactures, by population groups, in cities of 10,000 inhabitants or more.....	612
Principal industries in cities of 50,000 inhabitants or more, with per cent of total for state.....	613
Number and horsepower of prime movers.....	615
Fuel consumed.....	615

SPECIAL STATISTICS.

Textiles.....	617
Cotton goods, including cotton small wares.....	617
Wool manufactures.....	618
Knit goods.....	620
Silk manufactures.....	621
Machinery used in textile mills.....	622
Leather, tanned, curried, and finished.....	622
Boots and shoes.....	623
Slaughtering and meat packing.....	624
Electrical machinery, apparatus, and supplies.....	624
Paper and wood pulp.....	625
Textile machinery and parts.....	625
Printing and publishing.....	626
Laundries.....	626
Dyeing and cleaning.....	627
Custom sawmills and gristmills.....	627

GENERAL TABLES.

Comparative summary for selected industries and for cities: 1919, 1914, and 1909.....	628
Detailed statement of all industries combined and specified industries: 1919.....	636

CONTENTS.

9

MICHIGAN.

GENERAL STATISTICS.

	Page.
General character of the state.....	669
Comparative summary.....	670
Statistics for the state, by counties.....	671
Principal industries, by value of products.....	672
Persons engaged in manufacturing industries.....	673
Average number of wage earners for selected industries, with per cent, by sex and age.....	673
Average number of wage earners, by sex and age, and value of products for cities of 10,000 inhabitants or more.....	674
Wage earners, by months.....	674
Wage earners, by months, for selected industries and for cities.....	675
Average number of wage earners, by prevailing hours of labor per week, for selected industries and for cities.....	677
Size of establishments, by average number of wage earners, for selected industries and for cities.....	679
Size of establishments, by value of products.....	680
Size of establishments, by value of products, for selected industries.....	680
Size of establishments, by value of products, for cities of 10,000 inhabitants or more.....	682
Character of ownership, for selected industries and for cities.....	683
Manufactures, by population groups, in cities of 10,000 inhabitants or more.....	685
Principal industries in cities of 50,000 inhabitants or more, with per cent of total for state.....	685
Number and horsepower of prime movers.....	686
Fuel consumed.....	686

SPECIAL STATISTICS.

Automobiles, including bodies and parts.....	688
Shipbuilding, including boat building.....	688
Paper and wood pulp.....	688
Butter, cheese, and condensed milk.....	689
Slaughtering and meat packing.....	690
Leather, tanned, curried, and finished.....	690
Flour-mill and gristmill products.....	691
Beet sugar.....	691
Chemicals.....	691
Printing and publishing.....	691
Lumber and timber products.....	692
Laundries.....	692
Dyeing and cleaning.....	693
Custom gristmills and sawmills.....	693

GENERAL TABLES.

Comparative summary for selected industries and for cities: 1919, 1914, and 1909.....	694
Detailed statement of all industries combined and specified industries: 1919.....	695

MINNESOTA.

GENERAL STATISTICS.

General character of the state.....	717
Comparative summary.....	718
Statistics for the state, by counties.....	719
Principal industries, by value of products.....	720
Persons engaged in manufacturing industries.....	720
Average number of wage earners for selected industries, with per cent, by sex and age.....	721
Average number of wage earners, by sex and age, and value of products for cities of 10,000 inhabitants or more.....	722
Wage earners, by months.....	722
Wage earners, by months, for selected industries and for cities.....	722
Average number of wage earners, by prevailing hours of labor per week, for selected industries and for cities.....	724
Size of establishments, by average number of wage earners, for selected industries and for cities.....	726
Size of establishments, by value of products.....	727
Size of establishments, by value of products, for selected industries.....	727
Size of establishments, by value of products, for cities of 10,000 inhabitants or more.....	729
Character of ownership, for selected industries and for cities.....	729
Manufactures, by population groups, in cities of 10,000 inhabitants or more.....	730
Principal industries in cities of 50,000 inhabitants or more, with per cent of total for state.....	731
Number and horsepower of prime movers.....	732
Fuel consumed.....	732

SPECIAL STATISTICS.

Flour-mill and gristmill products.....	733
Slaughtering and meat packing.....	733
Butter, cheese, and condensed milk.....	734
Printing and publishing.....	734
Lumber and timber products.....	735
Laundries.....	735
Dyeing and cleaning.....	735
Custom sawmills and gristmills.....	735

GENERAL TABLES.

Comparative summary for selected industries and for cities: 1919, 1914, and 1909.....	737
Detailed statement of all industries combined and specified industries: 1919.....	740

MISSISSIPPI.

GENERAL STATISTICS.

	Page.
General character of the state.....	755
Comparative summary.....	756
Statistics for the state, by counties.....	757
Principal industries, by value of products.....	758
Persons engaged in manufacturing industries.....	758
Average number of wage earners for selected industries, with per cent, by sex and age.....	759
Average number of wage earners, by sex and age, and value of products for cities of 10,000 inhabitants or more.....	759
Wage earners, by months.....	759
Wage earners, by months, for selected industries and for cities.....	760
Average number of wage earners, by prevailing hours of labor per week, for selected industries and for cities.....	761
Size of establishments, by average number of wage earners, for selected industries and for cities.....	762
Size of establishments, by value of products.....	762
Size of establishments, by value of products, for selected industries.....	763
Size of establishments, by value of products, for cities of 10,000 inhabitants or more.....	764
Character of ownership, for selected industries and for cities.....	764
Manufactures, by population groups, in cities of 10,000 inhabitants or more.....	765
Number and horsepower of prime movers.....	766
Fuel consumed.....	766

SPECIAL STATISTICS.

Lumber and timber products.....	766
Oil and cake, cottonseed.....	767
Cotton goods.....	767
Turpentine and rosin.....	767
Fertilizers.....	767
Printing and publishing.....	768
Laundries.....	768
Dyeing and cleaning.....	768
Custom sawmills and gristmills.....	768

GENERAL TABLES.

Comparative summary for selected industries and for cities: 1919, 1914, and 1909.....	769
Detailed statement of all industries combined and specified industries: 1919.....	770

MISSOURI.

GENERAL STATISTICS.

General character of the state.....	775
Comparative summary.....	776
Statistics for the state, by counties.....	777
Principal industries, by value of products.....	779
Persons engaged in manufacturing industries.....	779
Average number of wage earners for selected industries, with per cent, by sex and age.....	780
Average number of wage earners, by sex and age, and value of products for cities of 10,000 inhabitants or more.....	780
Wage earners, by months.....	781
Wage earners, by months, for selected industries and for cities.....	781
Average number of wage earners, by prevailing hours of labor per week, for selected industries and for cities.....	782
Size of establishments, by average number of wage earners, for selected industries and for cities.....	784
Size of establishments, by value of products.....	785
Size of establishments, by value of products, for selected industries.....	785
Size of establishments, by value of products, for cities of 10,000 inhabitants or more.....	787
Character of ownership, for selected industries and for cities.....	788
Manufactures, by population groups, in cities of 10,000 inhabitants or more.....	789
Principal industries in cities of 50,000 inhabitants or more, with per cent of total for state.....	790
Number and horsepower of prime movers.....	790
Fuel consumed.....	791

SPECIAL STATISTICS.

Slaughtering and meat packing.....	792
Boots and shoes.....	792
Flour-mill and gristmill products.....	793
Printing and publishing.....	793
Butter.....	794
Electrical machinery, apparatus, and supplies.....	794
Laundries.....	794
Dyeing and cleaning.....	794
Custom sawmills and gristmills.....	794

GENERAL TABLES.

Comparative summary for selected industries and for cities: 1919, 1914, and 1909.....	796
Detailed statement of all industries combined and specified industries: 1919.....	800

MONTANA.

GENERAL STATISTICS.

General character of the state.....	817
Comparative summary.....	818
Statistics for the state, by counties.....	819

Page.

Principal industries, by value of products.....	819
Persons engaged in manufacturing industries.....	820
Average number of wage earners for selected industries, with per cent, by sex and age.....	820
Average number of wage earners, by sex and age, and value of products for cities of 10,000 inhabitants or more.....	820
Wage earners, by months.....	821
Wage earners, by months, for selected industries and for cities.....	821
Average number of wage earners, by prevailing hours of labor per week, for selected industries and for cities.....	822
Size of establishments, by average number of wage earners, for selected industries and for cities.....	823
Size of establishments, by value of products.....	823
Size of establishments, by value of products, for selected industries.....	824
Size of establishments, by value of products, for cities of 10,000 inhabitants or more.....	824
Character of ownership, for selected industries and for cities.....	825
Manufactures, by population groups, in cities of 10,000 inhabitants or more.....	826
Number and horsepower of prime movers.....	826
Fuel consumed.....	826

SPECIAL STATISTICS.

Flour-mill and gristmill products.....	827
Lumber and timber products.....	827
Slaughtering and meat packing.....	827
Printing and publishing.....	828
Laundries.....	828
Dyeing and cleaning.....	828
Custom sawmills and gristmills.....	828

GENERAL TABLES.

Comparative summary for selected industries and for cities: 1919, 1914, and 1909.....	829
Detailed statement of all industries combined and specified industries: 1919.....	830

NEBRASKA.

GENERAL STATISTICS.

General character of the state.....	833
Comparative summary.....	834
Statistics for the state, by counties.....	835
Principal industries, by value of products.....	836
Persons engaged in manufacturing industries.....	836
Average number of wage earners for selected industries, with per cent, by sex and age.....	837
Average number of wage earners, by sex and age, and value of products for cities of 10,000 inhabitants or more.....	837
Wage earners, by months.....	837
Wage earners, by months, for selected industries and for cities.....	838
Average number of wage earners, by prevailing hours of labor per week, for selected industries and for cities.....	839
Size of establishments, by average number of wage earners, for selected industries and for cities.....	840
Size of establishments, by value of products.....	840
Size of establishments, by value of products, for selected industries.....	841
Size of establishments, by value of products, for cities of 10,000 inhabitants or more.....	842
Character of ownership, for selected industries and for cities.....	843
Manufactures, by population groups, in cities of 10,000 inhabitants or more.....	844
Principal industries in cities of 50,000 inhabitants or more, with per cent of total for state.....	844
Number and horsepower of prime movers.....	845
Fuel consumed.....	845

SPECIAL STATISTICS.

Slaughtering and meat packing.....	846
Flour-mill and gristmill products.....	846
Butter, cheese, and condensed milk.....	847
Printing and publishing.....	847
Laundries.....	847
Dyeing and cleaning.....	848
Custom gristmills.....	848

GENERAL TABLES.

Comparative summary for selected industries and for cities: 1919, 1914, and 1909.....	848
Detailed statement of all industries combined and specified industries: 1919.....	850

NEVADA.

GENERAL STATISTICS.

General character of the state.....	857
Comparative summary.....	858
Statistics for the state, by counties.....	858
Principal industries, by value of products.....	858
Persons engaged in manufacturing industries.....	859
Average number of wage earners for selected industries, with per cent, by sex and age.....	859

NEVADA—Continued.

GENERAL STATISTICS—continued.

	Page.
Average number of wage earners, by sex and age, and value of products, for Reno.....	859
Wage earners, by months.....	859
Wage earners, by months, for selected industries and for Reno.....	860
Average number of wage earners, by prevailing hours of labor per week, for selected industries and for Reno.....	860
Size of establishments, by average number of wage earners, for selected industries and for Reno.....	861
Size of establishments, by value of products.....	861
Size of establishments, by value of products, for Reno.....	861
Character of ownership, for combined industries and for Reno.....	862
Number and horsepower of prime movers.....	862
Fuel consumed.....	862

SPECIAL STATISTICS.

Flour-mill and gristmill products.....	863
Printing and publishing.....	863
Laundries.....	863

GENERAL TABLES.

Comparative summary for selected industries and for Reno: 1919, 1914, and 1909.....	863
Detailed statement of all industries combined and specified industries: 1919.....	864

NEW HAMPSHIRE.

GENERAL STATISTICS.

General character of the state.....	867
Comparative summary.....	868
Statistics for the state, by counties.....	869
Principal industries, by value of products.....	869
Persons engaged in manufacturing industries.....	869
Average number of wage earners for selected industries, with per cent, by sex and age.....	870
Average number of wage earners, by sex and age, and value of products for cities of 10,000 inhabitants or more.....	870
Wage earners, by months.....	870
Wage earners, by months, for selected industries and for cities.....	871
Average number of wage earners, by prevailing hours of labor per week, for selected industries and for cities.....	872
Size of establishments, by average number of wage earners, for selected industries and for cities.....	873
Size of establishments, by value of products.....	873
Size of establishments, by value of products, for selected industries.....	874
Size of establishments, by value of products, for cities of 10,000 inhabitants or more.....	875
Character of ownership, for selected industries and for cities.....	875
Manufactures, by population groups, in cities of 10,000 inhabitants or more.....	876
Principal industries in Manchester, with per cent of total for state.....	877
Number and horsepower of prime movers.....	877
Fuel consumed.....	877

SPECIAL STATISTICS.

Cotton goods.....	878
Woolen and worsted goods.....	878
Knit goods.....	879
Boots and shoes.....	880
Paper and wood pulp.....	880
Lumber and timber products.....	881
Laundries.....	881
Dyeing and cleaning.....	881
Custom sawmills and gristmills.....	882

GENERAL TABLES.

Comparative summary for selected industries and for cities: 1919, 1914, and 1909.....	882
Detailed statement of all industries combined and specified industries: 1919.....	884

NEW JERSEY.

GENERAL STATISTICS.

General character of the state.....	889
Comparative summary.....	891
Statistics for the state, by counties.....	891
Principal industries, by value of products.....	891
Persons engaged in manufacturing industries.....	892
Average number of wage earners for selected industries, with per cent, by sex and age.....	893
Average number of wage earners, by sex and age, and value of products for cities of 10,000 inhabitants or more.....	894
Wage earners, by months.....	894
Wage earners, by months, for selected industries and for cities.....	895
Average number of wage earners, by prevailing hours of labor per week, for selected industries and for cities.....	898
Size of establishments, by average number of wage earners, for selected industries and for cities.....	901

Size of establishments, by value of products.....	902
Size of establishments, by value of products, for selected industries.....	903
Size of establishments, by value of products, for cities of 10,000 inhabitants or more.....	906
Character of ownership, for selected industries and for cities.....	907
Manufactures, by population groups, in cities of 10,000 inhabitants or more.....	910
Principal industries in cities of 50,000 inhabitants or more, with per cent of total for state.....	910
Number and horsepower of prime movers.....	912
Fuel consumed.....	912

SPECIAL STATISTICS.

Textiles.....	914
Machinery used in textile mills.....	914
Silk manufactures.....	914
Wool manufactures.....	915
Cotton manufactures.....	916
Knit goods.....	916
Hats, fur-felt.....	917
Shipbuilding, including boat building.....	917
Chemical industries.....	918
Electrical machinery, apparatus, and supplies.....	918
Slaughtering and meat packing.....	919
Rubber goods.....	919
Leather, tanned, curried, and finished.....	920
Paint and varnish.....	920
Brick, tile, pottery, and other clay products.....	920
Fertilizers.....	921
Printing and publishing.....	921
Laundries.....	921
Dyeing and cleaning.....	922
Custom sawmills and gristmills.....	922

GENERAL TABLES.

Comparative summary for selected industries and for cities: 1919, 1914, and 1909.....	923
Detailed statement of all industries combined and specified industries: 1919.....	930

NEW MEXICO.

GENERAL STATISTICS.

General character of the state.....	959
Comparative summary.....	960
Statistics for the state, by counties.....	960
Principal industries, by value of products.....	961
Persons engaged in manufacturing industries.....	961
Average number of wage earners for selected industries, with per cent, by sex and age.....	961
Average number of wage earners, by sex and age, and value of products for Albuquerque.....	961
Wage earners, by months.....	962
Wage earners, by months, for selected industries and for Albuquerque.....	962
Average number of wage earners, by prevailing hours of labor per week, for selected industries and for Albuquerque.....	962
Size of establishments, by average number of wage earners, for selected industries and for Albuquerque.....	963
Size of establishments, by value of products.....	963
Size of establishments, by value of products, for Albuquerque.....	963
Character of ownership.....	964
Number and horsepower of prime movers.....	964
Fuel consumed.....	964

SPECIAL STATISTICS.

Laundries.....	965
Dyeing and cleaning.....	965
Custom flour mills and gristmills.....	965

GENERAL TABLES.

Comparative summary for selected industries and for Albuquerque: 1919, 1914, and 1909.....	965
Detailed statement of all industries combined and specified industries: 1919.....	966

NEW YORK.

GENERAL STATISTICS.

General character of the state.....	969
Comparative summary.....	970
Statistics for the state, by counties.....	971
Principal industries, by value of products.....	972
Persons engaged in manufacturing industries.....	973
Average number of wage earners for selected industries, with per cent, by sex and age.....	974
Average number of wage earners, by sex and age, and value of products for cities of 10,000 inhabitants or more.....	975
Wage earners, by months.....	975
Wage earners, by months, for selected industries and for cities.....	976
Average number of wage earners, by prevailing hours of labor per week, for selected industries and for cities.....	980
Size of establishments, by average number of wage earners, for selected industries and for cities.....	984

Size of establishments, by value of products.....	986
Size of establishments, by value of products, for selected industries.....	986
Size of establishments, by value of products, for cities of 10,000 inhabitants or more.....	992
Character of ownership, for selected industries and for cities.....	995
Manufactures, by population groups, in cities of 10,000 inhabitants or more.....	999
Principal industries in cities having 50,000 inhabitants or more, with per cent of total for state.....	999
Number and horsepower of prime movers.....	1001
Fuel consumed.....	1001

SPECIAL STATISTICS.

Slaughtering and meat packing.....	1003
Printing and publishing.....	1003
Textiles.....	1005
Machinery used in textile mills.....	1005
Knit goods.....	1005
Wool manufactures.....	1006
Silk goods, including throwsters.....	1008
Cotton manufactures.....	1008
Hats, fur-felt.....	1009
Shipbuilding, including boat building.....	1009
Boots and shoes.....	1010
Electrical machinery, apparatus, and supplies.....	1011
Flour-mill and gristmill products.....	1011
Automobiles, including bodies and parts.....	1011
Paper and wood pulp.....	1011
Butter, cheese, and condensed milk.....	1013
Druggists' preparations, patent medicines and compounds, and perfumery and cosmetics.....	1013
Iron and steel, steel works and rolling mills.....	1013
Leather, tanned, curried, and finished.....	1014
Chemicals.....	1014
Manufactured gas.....	1015
Brass, bronze, and copper products.....	1015
Iron and steel, blast furnaces.....	1015
Soap.....	1016
Paint and varnish.....	1016
Musical instruments, pianos and organs, and materials.....	1017
Engines, steam, gas, and water.....	1017
Leather gloves and mittens.....	1017
Canning and preserving.....	1018
Agricultural implements.....	1019
Laundries.....	1019
Dyeing and cleaning.....	1019
Custom sawmills and gristmills.....	1019

GENERAL TABLES.

Comparative summary for selected industries and for cities: 1919, 1914, and 1909.....	1020
Detailed statement of all industries combined and specified industries: 1919.....	1038

NORTH CAROLINA.

GENERAL STATISTICS.

General character of the state.....	1101
Comparative summary.....	1102
Statistics for the state, by counties.....	1103
Principal industries, by value of products.....	1103
Persons engaged in manufacturing industries.....	1104
Average number of wage earners for selected industries, with per cent, by sex and age.....	1105
Average number of wage earners, by sex and age, and value of products, for cities of 10,000 inhabitants or more.....	1105
Wage earners, by months.....	1106
Wage earners, by months, for selected industries and for cities.....	1106
Average number of wage earners, by prevailing hours of labor per week, for selected industries and for cities.....	1107
Size of establishments, by average number of wage earners, for selected industries and for cities.....	1109
Size of establishments, by value of products.....	1109
Size of establishments, by value of products, for selected industries.....	1110
Size of establishments, by value of products, for cities of 10,000 inhabitants or more.....	1111
Character of ownership, for selected industries and for cities.....	1112
Manufactures, by population groups, in cities of 10,000 inhabitants or more.....	1113
Number and horsepower of prime movers.....	1113
Fuel consumed.....	1114

SPECIAL STATISTICS.

Cotton goods.....	1114
Knit goods.....	1115
Machinery used in textile mills.....	1115
Fertilizers.....	1116
Flour-mill and gristmill products.....	1116
Leather, tanned, curried, and finished.....	1116
Lumber and timber products.....	1117
Printing and publishing.....	1117
Laundries.....	1117
Dyeing and cleaning.....	1118
Custom sawmills and gristmills.....	1118

GENERAL TABLES.

Comparative summary for selected industries and for cities: 1919, 1914, and 1909.....	1119
Detailed statement of all industries combined and specified industries: 1919.....	1120

NORTH DAKOTA.

GENERAL STATISTICS.	
	Page.
General character of the state.....	1125
Comparative summary.....	1126
Statistics for the state, by counties.....	1127
Principal industries, by value of products.....	1127
Persons engaged in manufacturing industries.....	1128
Average number of wage earners for selected industries, with per cent, by sex and age.....	1128
Average number of wage earners, by sex and age, and value of products for cities of 10,000 inhabitants or more.....	1128
Wage earners, by months.....	1128
Wage earners, by months, for selected industries and for cities.....	1129
Average number of wage earners, by prevailing hours of labor per week, for selected industries and for cities.....	1129
Size of establishments, by average number of wage earners, for selected industries and for cities.....	1130
Size of establishments, by value of products.....	1130
Size of establishments, by value of products, for selected industries.....	1131
Size of establishments, by value of products, for cities of 10,000 inhabitants or more.....	1131
Character of ownership, for selected industries and for cities.....	1132
Manufactures, by population groups, in cities of 10,000 inhabitants or more.....	1132
Number and horsepower of prime movers.....	1133
Fuel consumed.....	1133
SPECIAL STATISTICS.	
Flour-mill and gristmill products.....	1134
Butter.....	1134
Printing and publishing.....	1134
Laundries.....	1134
Dyeing and cleaning.....	1134
Custom gristmills.....	1135

GENERAL TABLES.

Comparative summary for selected industries and cities: 1919, 1914, and 1909.....	1135
Detailed statement of all industries combined and specified industries: 1919.....	1136

OHIO.

GENERAL STATISTICS.

General character of the state.....	1139
Comparative summary.....	1140
Statistics for the state, by counties.....	1141
Principal industries, by value of products.....	1142
Persons engaged in manufacturing industries.....	1143
Average number of wage earners for selected industries, with per cent, by sex and age.....	1143
Average number of wage earners, by sex and age, and value of products for cities of 10,000 inhabitants or more.....	1144
Wage earners, by months.....	1145
Wage earners, by months, for selected industries and for cities.....	1145
Average number of wage earners, by prevailing hours of labor per week, for selected industries and for cities.....	1148
Size of establishments, by average number of wage earners, for selected industries and for cities.....	1152
Size of establishments, by value of products.....	1153
Size of establishments, by value of products, for selected industries.....	1154
Size of establishments, by value of products, for cities of 10,000 inhabitants or more.....	1155
Character of ownership, for selected industries and for cities.....	1160
Manufactures, by population groups, in cities of 10,000 inhabitants or more.....	1162
Principal industries in cities of 50,000 inhabitants or more, with per cent of total for state.....	1163
Number and horsepower of prime movers.....	1164
Fuel consumed.....	1165

SPECIAL STATISTICS.

Iron and steel, blast furnaces.....	1166
Steel works and rolling mills.....	1167
Rubber tires, tubes, and rubber goods.....	1168
Automobiles, including bodies and parts.....	1168
Slaughtering and meat packing.....	1168
Electrical machinery, apparatus, and supplies.....	1169
Printing and publishing.....	1169
Flour-mill and gristmill products.....	1170
Boots and shoes.....	1170
Machine tools.....	1171
Butter, cheese, and condensed milk.....	1171
Brick, tile, pottery, and other clay products.....	1171
Paper and wood pulp.....	1172
Paint and varnish.....	1173
Chemicals.....	1173
Engines, steam, gas, and water.....	1173
Petroleum, refining.....	1174
Glass.....	1174
Agricultural implements.....	1174
Leather, tanned, curried, and finished.....	1175
Laundries.....	1175
Dyeing and cleaning.....	1175
Custom sawmills and gristmills.....	1175

GENERAL TABLES.

Comparative summary for selected industries and for cities: 1919, 1914, and 1909.....	1177
Detailed statement of all industries combined and specified industries: 1919.....	1186

OKLAHOMA.

GENERAL STATISTICS.

General character of the state.....	1213
Comparative summary.....	1214
Statistics for the state, by counties.....	1215
Principal industries, by value of products.....	1216
Persons engaged in manufacturing industries.....	1216
Average number of wage earners for selected industries, with per cent, by sex and age.....	1217
Average number of wage earners, by sex and age, and value of products for cities of 10,000 inhabitants or more.....	1217
Wage earners, by months.....	1217
Wage earners, by months, for selected industries and for cities.....	1218
Average number of wage earners, by prevailing hours of labor per week, for selected industries and for cities.....	1219
Size of establishments, by average number of wage earners, for selected industries and for cities.....	1220
Size of establishments, by value of products.....	1220
Size of establishments, by value of products, for selected industries.....	1221
Size of establishments, by value of products, for cities of 10,000 inhabitants or more.....	1221
Character of ownership, for selected industries and for cities.....	1222
Manufactures, by population groups, in cities of 10,000 inhabitants or more.....	1223
Principal industries in cities having 50,000 inhabitants or more, with per cent of total for state.....	1223
Number and horsepower of prime movers.....	1223
Fuel consumed.....	1224

SPECIAL STATISTICS.

Petroleum, refining.....	1224
Flour-mill and gristmill products.....	1225
Printing and publishing.....	1225
Laundries.....	1226
Dyeing and cleaning.....	1226
Custom sawmills and gristmills.....	1226

GENERAL TABLES.

Comparative summary for selected industries and for cities: 1919, 1914, and 1909.....	1227
Detailed statement of all industries combined and specified industries: 1919.....	1228

OREGON.

GENERAL STATISTICS.

General character of the state.....	1235
Comparative summary.....	1236
Statistics for the state, by counties.....	1237
Principal industries, by value of products.....	1237
Persons engaged in manufacturing industries.....	1238
Average number of wage earners for selected industries, with per cent, by sex and age.....	1238
Average number of wage earners, by sex and age, and value of products for cities of 10,000 inhabitants or more.....	1238
Wage earners, by months.....	1239
Wage earners, by months, for selected industries and for cities.....	1239
Average number of wage earners, by prevailing hours of labor per week, for selected industries and for cities.....	1240
Size of establishments, by average number of wage earners, for selected industries and for cities.....	1241
Size of establishments, by value of products.....	1241
Size of establishments, by value of products, for selected industries.....	1242
Size of establishments, by value of products, for cities of 10,000 inhabitants or more.....	1243
Character of ownership, for selected industries and for cities.....	1243
Manufactures, by population groups, in cities of 10,000 inhabitants or more.....	1244
Principal industries in Portland, with per cent of total for state.....	1244
Number and horsepower of prime movers.....	1245
Fuel consumed.....	1245

SPECIAL STATISTICS.

Lumber and timber products.....	1246
Flour-mill and gristmill products.....	1246
Slaughtering and meat packing.....	1246
Shipbuilding, including boat building.....	1247
Canning and preserving.....	1247
Butter, cheese, and condensed milk.....	1248
Printing and publishing.....	1248
Laundries.....	1249
Dyeing and cleaning.....	1249
Custom gristmills.....	1249

GENERAL TABLES.

Comparative summary for selected industries and for cities: 1919, 1914, and 1909.....	1250
Detailed statement of all industries combined and specified industries: 1919.....	1252

PENNSYLVANIA.

GENERAL STATISTICS.

	Page.
General character of the state.....	1261
Comparative summary.....	1262
Statistics for the state, by counties.....	1263
Principal industries, by value of products.....	1264
Persons engaged in manufacturing industries.....	1265
Average number of wage earners for selected industries, with per cent, by sex and age.....	1265
Average number of wage earners, by sex and age, and value of products for cities of 10,000 inhabitants or more.....	1266
Wage earners, by months.....	1267
Wage earners, by months, for selected industries and for cities.....	1268
Average number of wage earners, by prevailing hours of labor per week, for selected industries and for cities.....	1272
Size of establishments, by average number of wage earners, for selected industries and for cities.....	1276
Size of establishments, by value of products.....	1278
Size of establishments, by value of products, for selected industries.....	1278
Size of establishments, by value of products, for cities of 10,000 inhabitants or more.....	1281
Character of ownership, for selected industries and for cities.....	1284
Manufactures, by population groups, in cities of 10,000 inhabitants or more.....	1287
Principal industries in cities of 50,000 inhabitants or more, with per cent of total for state.....	1287
Number and horsepower of prime movers.....	1289
Fuel consumed.....	1289

SPECIAL STATISTICS.

Iron and steel, blast furnaces.....	1291
Steel works and rolling mills.....	1291
Wire.....	1293
Tin plate and terneplate.....	1293
Textiles.....	1293
Wool manufactures.....	1294
Knit goods.....	1295
Cotton manufactures.....	1296
Silk manufactures.....	1297
Hats, fur-felt.....	1298
Machinery used in textile mills.....	1298
Printing and publishing.....	1298
Leather, tanned, curried, and finished.....	1299
Boots and shoes.....	1300
Chemical industries.....	1300
Petroleum, refining.....	1301
Coke.....	1301
Glass.....	1302
Paints and varnishes.....	1302
Slaughtering and meat packing.....	1303
Flour-mill and gristmill products.....	1303
Butter, cheese, and condensed milk.....	1304
Electrical machinery, apparatus, and supplies.....	1304
Engines, steam, gas, and water.....	1304
Brass, bronze, and copper products.....	1305
Paper and wood pulp.....	1305
Laundries.....	1306
Dyeing and cleaning.....	1306
Custom sawmills and gristmills.....	1306

GENERAL TABLES.

Comparative summary for selected industries and for cities: 1919, 1914, and 1909.....	1307
Detailed statement of all industries combined and specified industries: 1919.....	1316

RHODE ISLAND.

GENERAL STATISTICS.

General character of the state.....	1351
Comparative summary.....	1352
Statistics for the state, by counties.....	1353
Principal industries, by value of products.....	1353
Persons engaged in manufacturing industries.....	1353
Average number of wage earners for selected industries, with per cent, by sex and age.....	1354
Average number of wage earners, by sex and age, and value of products for cities of 10,000 inhabitants or more.....	1354
Wage earners, by months.....	1354
Wage earners, by months, for selected industries and for cities.....	1355
Average number of wage earners, by prevailing hours of labor per week, for selected industries and for cities.....	1356
Size of establishments, by average number of wage earners, for selected industries and for cities.....	1357
Size of establishments, by value of products.....	1357
Size of establishments, by value of products, for selected industries.....	1358
Size of establishments, by value of products, for cities of 10,000 inhabitants or more.....	1359
Character of ownership, for selected industries and for cities.....	1360
Manufactures, by population groups, in cities of 10,000 inhabitants or more.....	1361
Principal industries in cities of 50,000 inhabitants or more, with per cent of total for state.....	1361
Number and horsepower of prime movers.....	1362
Fuel consumed.....	1362

RHODE ISLAND—Con.

SPECIAL STATISTICS.	Page.
Textiles.....	1363
Cotton manufactures.....	1363
Woolen and worsted goods.....	1364
Silk goods.....	1365
Knit goods.....	1365
Machinery used in textile mills.....	1366
Printing and publishing.....	1366
Laundries.....	1366
Dyeing and cleaning.....	1367
Custom sawmills.....	1367

GENERAL TABLES.

Comparative summary for selected industries and for cities: 1919, 1914, and 1909.....	1368
Detailed statement of all industries combined and specified industries: 1919.....	1370

SOUTH CAROLINA.

GENERAL STATISTICS.

General character of the state.....	1381
Comparative summary.....	1382
Statistics for the state, by counties.....	1383
Principal industries, by value of products.....	1383
Persons engaged in manufacturing industries.....	1384
Average number of wage earners for selected industries, with per cent, by sex and age.....	1384
Average number of wage earners, by sex and age, and value of products for cities of 10,000 inhabitants or more.....	1384
Wage earners, by months.....	1385
Wage earners, by months, for selected industries and for cities.....	1385
Average number of wage earners, by prevailing hours of labor per week, for selected industries and for cities.....	1386
Size of establishments, by average number of wage earners, for selected industries and for cities.....	1387
Size of establishments, by value of products.....	1387
Size of establishments, by value of products, for selected industries.....	1388
Size of establishments, by value of products, for cities of 10,000 inhabitants or more.....	1389
Character of ownership, for selected industries and for cities.....	1389
Manufactures, by population groups, in cities of 10,000 inhabitants or more.....	1390
Principal industries in Charleston, with per cent of total for state.....	1390
Number and horsepower of prime movers.....	1390
Fuel consumed.....	1391

SPECIAL STATISTICS.

Cotton goods.....	1392
Fertilizers.....	1392
Lumber and timber products.....	1392
Printing and publishing.....	1393
Laundries.....	1393
Dyeing and cleaning.....	1393
Custom gristmills and sawmills.....	1393

GENERAL TABLES.

Comparative summary for selected industries and for cities: 1919, 1914, and 1909.....	1395
Detailed statement of all industries combined and specified industries: 1919.....	1396

SOUTH DAKOTA.

GENERAL STATISTICS.

General character of the state.....	1401
Comparative summary.....	1402
Statistics for the state, by counties.....	1402
Principal industries, by value of products.....	1403
Persons engaged in manufacturing industries.....	1404
Average number of wage earners for selected industries, with per cent, by sex and age.....	1404
Average number of wage earners, by sex and age, and value of products for cities of 10,000 inhabitants or more.....	1404
Wage earners, by months.....	1404
Wage earners, by months, for selected industries and for cities.....	1405
Average number of wage earners, by prevailing hours of labor per week, for selected industries and for cities.....	1405
Size of establishments, by average number of wage earners, for selected industries and for cities.....	1406
Size of establishments, by value of products.....	1406
Size of establishments, by value of products, for selected industries.....	1406
Size of establishments, by value of products, for cities of 10,000 inhabitants or more.....	1407
Character of ownership, for selected industries and for cities.....	1407
Manufactures, by population groups, in cities of 10,000 inhabitants, or more.....	1408
Number and horsepower of prime movers.....	1408
Fuel consumed.....	1409

SPECIAL STATISTICS.

Butter.....	1409
Flour-mill and gristmill products.....	1409
Printing and publishing.....	1409

Laundries.....	1410
Dyeing and cleaning.....	1410
Custom flour mills and gristmills.....	1410

GENERAL TABLES.

Comparative summary for selected industries and for cities: 1919, 1914, and 1909.....	1411
Detailed statement of all industries combined and specified industries: 1919.....	1412

TENNESSEE.

GENERAL STATISTICS.

General character of the state.....	1415
Comparative summary.....	1416
Statistics for the state, by counties.....	1417
Principal industries, by value of products.....	1418
Persons engaged in manufacturing industries.....	1419
Average number of wage earners for selected industries, with per cent, by sex and age.....	1419
Average number of wage earners, by sex and age, and value of products for cities of 10,000 inhabitants or more.....	1420
Wage earners, by months.....	1420
Wage earners, by months, for selected industries and for cities.....	1420
Average number of wage earners, by prevailing hours of labor per week, for selected industries and for cities.....	1421
Size of establishments, by average number of wage earners, for selected industries and for cities.....	1423
Size of establishments, by value of products.....	1423
Size of establishments, by value of products, for selected industries.....	1424
Size of establishments, by value of products, for cities of 10,000 inhabitants or more.....	1425
Character of ownership, for selected industries and for cities.....	1426
Manufactures, by population groups, in cities of 10,000 inhabitants or more.....	1427
Comparative summary—Bristol, Tenn., and Bristol, Va.....	1427
Principal industries in cities of 50,000 inhabitants or more, with per cent of total for state.....	1428
Number and horsepower of prime movers.....	1429
Fuel consumed.....	1429

SPECIAL STATISTICS.

Flour-mill and gristmill products.....	1430
Lumber and timber products.....	1430
Textiles.....	1430
Knit goods.....	1431
Cotton goods.....	1431
Woolen goods.....	1431
Printing and publishing.....	1431
Dyestuffs and extracts—natural.....	1432
Fertilizers.....	1432
Iron and steel, blast furnaces.....	1432
Laundries.....	1432
Dyeing and cleaning.....	1433
Custom gristmills and sawmills.....	1433

GENERAL TABLES.

Comparative summary for selected industries and for cities: 1919, 1914, and 1909.....	1434
Detailed statement of all industries combined and specified industries: 1919.....	1436

TEXAS.

GENERAL STATISTICS.

General character of the state.....	1447
Comparative summary.....	1448
Statistics for the state, by counties.....	1449
Principal industries, by value of products.....	1451
Persons engaged in manufacturing industries.....	1451
Average number of wage earners for selected industries, with per cent, by sex and age.....	1452
Average number of wage earners, by sex and age, and value of products in cities of 10,000 inhabitants or more.....	1452
Wage earners, by months.....	1453
Wage earners, by months, for selected industries and for cities.....	1453
Average number of wage earners, by prevailing hours of labor per week, for selected industries and for cities.....	1455
Size of establishments, by average number of wage earners, for selected industries and for cities.....	1457
Size of establishments, by value of products.....	1458
Size of establishments, by value of products, for selected industries.....	1458
Size of establishments, by value of products, for cities of 10,000 inhabitants or more.....	1460
Character of ownership, for selected industries and for cities.....	1461
Manufactures, by population groups, in cities of 10,000 inhabitants or more.....	1462
Principal industries in cities of 50,000 inhabitants or more, with per cent of total for state.....	1463
Number and horsepower of prime movers.....	1463
Fuel consumed.....	1464

SPECIAL STATISTICS.

Petroleum, refining.....	1465
Slaughtering and meat packing.....	1465
Flour-mill and gristmill products.....	1466
Lumber and timber products.....	1466
Printing and publishing.....	1466

Rice, cleaning and polishing.....	1467
Laundries.....	1467
Dyeing and cleaning.....	1467
Custom sawmills and gristmills.....	1467

GENERAL TABLES.

Comparative summary for selected industries and for cities: 1919, 1914, and 1909.....	1469
Detailed statement of all industries combined and specified industries: 1919.....	1472

UTAH.

GENERAL STATISTICS.

General character of the state.....	1485
Comparative summary.....	1486
Statistics for the state, by counties.....	1486
Principal industries, by value of products.....	1487
Persons engaged in manufacturing industries.....	1487
Average number of wage earners for selected industries, with per cent, by sex and age.....	1488
Average number of wage earners, by sex and age, and value of products for cities of 10,000 inhabitants or more.....	1488
Wage earners, by months.....	1488
Wage earners, by months, for selected industries and for cities.....	1489
Average number of wage earners, by prevailing hours of labor per week, for selected industries and for cities.....	1489
Size of establishments, by average number of wage earners, for selected industries and for cities.....	1490
Size of establishments, by value of products.....	1491
Size of establishments, by value of products, for selected industries.....	1491
Size of establishments, by value of products, for cities of 10,000 inhabitants or more.....	1492
Character of ownership, for selected industries and for cities.....	1492
Manufactures, by population groups, in cities of 10,000 inhabitants or more.....	1493
Principal industries in Salt Lake City, with per cent of total for state.....	1493
Number and horsepower of prime movers.....	1493
Fuel consumed.....	1494

SPECIAL STATISTICS.

Beet sugar.....	1494
Flour-mill and gristmill products.....	1494
Canning and preserving.....	1495
Printing and publishing.....	1495
Butter, cheese, and condensed milk.....	1495
Laundries.....	1495
Dyeing and cleaning.....	1496
Custom gristmills and sawmills.....	1496

GENERAL TABLES.

Comparative summary for selected industries and for cities: 1919, 1914, and 1909.....	1497
Detailed statement of all industries combined and specified industries: 1919.....	1498

VERMONT.

GENERAL STATISTICS.

General character of the state.....	1503
Comparative summary.....	1504
Statistics for the state, by counties.....	1504
Principal industries, by value of products.....	1505
Persons engaged in manufacturing industries.....	1505
Average number of wage earners for selected industries, with per cent, by sex and age.....	1506
Average number of wage earners, by sex and age, and value of products for cities of 10,000 inhabitants or more.....	1506
Wage earners, by months.....	1507
Wage earners, by months, for selected industries and for cities.....	1507
Average number of wage earners, by prevailing hours of labor per week, for selected industries and for cities.....	1508
Size of establishments, by average number of wage earners, for selected industries and for cities.....	1509
Size of establishments, by value of products.....	1509
Size of establishments, by value of products, for selected industries.....	1510
Size of establishments, by value of products, for cities of 10,000 inhabitants or more.....	1511
Character of ownership, for selected industries and for cities.....	1511
Manufactures, by population groups, in cities of 10,000 inhabitants or more.....	1512
Number and horsepower of prime movers.....	1512
Fuel consumed.....	1512

SPECIAL STATISTICS.

Butter, cheese, and condensed milk.....	1513
Woolen and worsted goods.....	1513
Paper and wood pulp.....	1513
Flour-mill and gristmill products.....	1514
Laundries.....	1514
Dyeing and cleaning.....	1514
Custom sawmills and gristmills.....	1514

GENERAL TABLES.

Comparative summary for selected industries and for cities: 1919, 1914, and 1909.....	1515
Detailed statement of all industries combined and specified industries: 1919.....	1516

VIRGINIA.

GENERAL STATISTICS.

	Page.
General character of the state.....	1521
Comparative summary.....	1523
Statistics for the state, by counties.....	1523
Principal industries, by value of products.....	1524
Persons engaged in manufacturing industries.....	1525
Average number of wage earners for selected industries, with per cent, by sex and age.....	1525
Average number of wage earners, by sex and age, and value of products for cities of 10,000 inhabitants or more.....	1526
Wage earners, by months.....	1526
Wage earners, by months, for selected industries and for cities.....	1527
Average number of wage earners, by prevailing hours of labor per week, for selected industries and for cities.....	1528
Size of establishments, by average number of wage earners, for selected industries and for cities.....	1530
Size of establishments, by value of products.....	1531
Size of establishments, by value of products, for selected industries.....	1531
Size of establishments, by value of products, for cities of 10,000 inhabitants or more.....	1532
Character of ownership, for selected industries and for cities.....	1533
Manufactures, by population groups, in cities of 10,000 inhabitants or more.....	1534
Comparative summary, Bristol, Tenn., and Bristol, Va.....	1534
Principal industries in cities of 50,000 inhabitants or more, with per cent of total for state.....	1535
Number and horsepower of prime movers.....	1535
Fuel consumed.....	1536

SPECIAL STATISTICS.

Flour-mill and gristmill products.....	1537
Lumber and timber products.....	1537
Fertilizers.....	1537
Leather, tanned, curried, and finished.....	1537
Iron and steel, blast furnaces.....	1538
Printing and publishing.....	1538
Shipbuilding, including boat building.....	1538
Laundries.....	1538
Dyeing and cleaning.....	1539
Custom sawmills and gristmills.....	1539

GENERAL TABLES.

Comparative summary for selected industries and for cities: 1919, 1914, and 1909.....	1540
Detailed statement of all industries combined and specified industries: 1919.....	1542

WASHINGTON.

GENERAL STATISTICS.

General character of the state.....	1551
Comparative summary.....	1552
Statistics for the state, by counties.....	1553
Principal industries, by value of products.....	1554
Persons engaged in manufacturing industries.....	1554
Average number of wage earners for selected industries, with per cent, by sex and age.....	1555
Average number of wage earners, by sex and age, and value of products for cities of 10,000 inhabitants or more.....	1555
Wage earners, by months.....	1555
Wage earners, by months, for selected industries and for cities.....	1556
Average number of wage earners, by prevailing hours of labor per week, for selected industries and for cities.....	1557
Size of establishments, by average number of wage earners, for selected industries and for cities.....	1558
Size of establishments, by value of products.....	1558
Size of establishments, by value of products, for selected industries.....	1559
Size of establishments, by value of products, for cities of 10,000 inhabitants or more.....	1560
Character of ownership, for selected industries and for cities.....	1561
Manufactures, by population groups, in cities of 10,000 inhabitants or more.....	1562
Principal industries in cities of 50,000 inhabitants or more, with per cent of total for state.....	1562
Number and horsepower of prime movers.....	1563
Fuel consumed.....	1563

SPECIAL STATISTICS.

Lumber and timber products.....	1564
Shipbuilding, including boat building.....	1564
Flour-mill and gristmill products.....	1565
Slaughtering and meat packing.....	1565
Butter, cheese, and condensed milk.....	1566
Canning and preserving.....	1567
Printing and publishing.....	1567
Laundries.....	1567
Dyeing and cleaning.....	1568
Custom gristmills.....	1568

GENERAL TABLES.

Comparative summary for selected industries and for cities: 1919, 1914, and 1909.....	1569
Detailed statement of all industries combined and specified industries: 1919.....	1572

WEST VIRGINIA.

GENERAL STATISTICS.

	Page.
General character of the state.....	1587
Comparative summary.....	1589
Statistics for the state, by counties.....	1587
Principal industries, by value of products.....	1588
Persons engaged in manufacturing industries.....	1588
Average number of wage earners for selected industries, with per cent, by sex and age.....	1589
Average number of wage earners, by sex and age, and value of products for cities of 10,000 inhabitants or more.....	1589
Wage earners, by months.....	1589
Wage earners, by months, for selected industries and for cities.....	1590
Average number of wage earners, by prevailing hours of labor per week, for selected industries and for cities.....	1591
Size of establishments, by average number of wage earners, for selected industries and for cities.....	1592
Size of establishments, by value of products.....	1593
Size of establishments, by value of products, for selected industries.....	1594
Size of establishments, by value of products, for cities of 10,000 inhabitants or more.....	1595
Character of ownership, for selected industries and for cities.....	1595
Manufactures, by population groups, in cities of 10,000 inhabitants or more.....	1596
Number and horsepower of prime movers.....	1597
Fuel consumed.....	1597

SPECIAL STATISTICS.

Iron and steel, blast furnaces.....	1598
Steel works and rolling mills.....	1598
Tin plate and terneplate.....	1598
Glass.....	1598
Lumber and timber products.....	1598
Leather, tanned, curried, and finished.....	1599
Flour mill and gristmill products.....	1599
Laundries.....	1599
Dyeing and cleaning.....	1600
Custom sawmills and gristmills.....	1600

GENERAL TABLES.

Comparative summary for selected industries and for cities: 1919, 1914, and 1909.....	1601
Detailed statement of all industries combined and specified industries: 1919.....	1602

WISCONSIN.

GENERAL STATISTICS.

General character of the state.....	1609
Comparative summary.....	1610
Statistics for the state, by counties.....	1611
Principal industries, by value of products.....	1612
Persons engaged in manufacturing industries.....	1613
Average number of wage earners for selected industries, with per cent, by sex and age.....	1613
Average number of wage earners, by sex and age, and value of products for cities of 10,000 inhabitants or more.....	1614
Wage earners, by months.....	1614
Wage earners, by months, for selected industries and for cities.....	1615
Average number of wage earners, by prevailing hours of labor per week, for selected industries and for cities.....	1617
Size of establishments, by average number of wage earners, for selected industries and for cities.....	1619
Size of establishments, by value of products.....	1620
Size of establishments, by value of products, for selected industries.....	1620
Size of establishments, by value of products, for cities of 10,000 inhabitants or more.....	1623
Character of ownership, for selected industries and for cities.....	1624
Manufactures, by population groups, in cities of 10,000 inhabitants or more.....	1625
Principal industries in cities of 50,000 inhabitants or more, with per cent of total for state.....	1626
Number and horsepower of prime movers.....	1626
Fuel consumed.....	1627

SPECIAL STATISTICS.

Butter, cheese, and condensed milk.....	1628
Slaughtering and meat packing industry.....	1628
Automobiles, including bodies and parts.....	1629
Leather, tanned, curried, and finished.....	1629
Engines, steam, gas, and water.....	1629
Paper and wood pulp.....	1630
Lumber and timber products.....	1631
Flour-mill and gristmill products.....	1631
Boots and shoes.....	1631
Agricultural implements.....	1632
Printing and publishing.....	1632
Laundries.....	1633
Dyeing and cleaning.....	1633
Custom gristmills and sawmills.....	1633

GENERAL TABLES.

Comparative summary for selected industries and for cities: 1919, 1914, and 1909.....	1634
Detailed statement of all industries combined and specified industries: 1919.....	1638

WYOMING.

GENERAL STATISTICS.

	Page.
General character of the state.....	1653
Comparative summary.....	1654
Statistics for the state, by counties.....	1654
Principal industries, by value of products.....	1655
Persons engaged in manufacturing industries.....	1655
Average number of wage earners for selected industries, with per cent, by sex and age.....	1655
Average number of wage earners, by sex and age, and value of products for cities of 10,000 inhabitants or more.....	1655
Wage earners, by months.....	1656
Wage earners, by months, for selected industries and for cities.....	1656
Average number of wage earners, by prevailing hours of labor per week, for selected industries and for cities.....	1656
Size of establishments, by average number of wage earners, for selected industries and for cities.....	1657
Size of establishments, by value of products.....	1657
Size of establishments, by value of products, for selected industries.....	1657
Size of establishments, by value of products, for Cheyenne.....	1658
Character of ownership, for selected industries and for Cheyenne.....	1658
Manufactures, by population groups, in cities of 10,000 inhabitants or more.....	1658
Number and horsepower of prime movers.....	1659
Fuel consumed.....	1659

SPECIAL STATISTICS.

Flour-mill and gristmill products.....	1660
Butter.....	1660
Laundries.....	1660
Dyeing and cleaning.....	1660

GENERAL TABLES.

Comparative summary for selected industries, and for Cheyenne: 1919, 1914, and 1909.....	1661
Detailed statement of all industries combined and specified industries: 1919.....	1662

ALASKA.

GENERAL STATISTICS.

General character of the territory.....	1665
Comparative summary.....	1665
Comparative summary for selected industries.....	1666
Wage earners, by months.....	1666
Character of ownership.....	1666
Size of establishments, by value of products.....	1666

GENERAL TABLE.

Detailed statement of all industries combined and specified industries: 1919.....	1667
---	------

HAWAII.

GENERAL STATISTICS.

General character of the territory.....	1669
Comparative summary.....	1670
Principal industries, by value of products.....	1671
Persons engaged in manufacturing industries.....	1671
Average number of wage earners for selected industries and cities, with per cent, by sex and age.....	1671
Wage earners, by months.....	1672
Wage earners, by months, for selected industries and for cities.....	1672
Average number of wage earners, by prevailing hours of labor per week, for selected industries and for cities.....	1672
Size of establishments, by average number of wage earners, for selected industries and cities.....	1673
Size of establishments, by value of products.....	1673
Size of establishments, by value of products, for selected industries.....	1673
Size of establishments, by value of products, for cities of 10,000 inhabitants or more.....	1674
Character of ownership, for selected industries and for cities.....	1674
Manufactures, by population groups, in cities of 10,000 inhabitants or more.....	1674
Number and horsepower of prime movers.....	1675
Fuel consumed.....	1675

SPECIAL STATISTICS.

Canning and preserving, pineapples.....	1676
Rice mills.....	1676
Rice, cleaning and polishing.....	1676
Laundries.....	1676

GENERAL TABLES.

Comparative summary for selected industries for the territory and for Honolulu: 1919, 1909, and 1899.....	1677
Detailed statement of all industries combined and specified industries: 1919.....	1678
Detailed statement for Honolulu, all industries combined and specified industries, and for Hilo, all industries combined: 1919.....	1680

MINES AND QUARRIES.

Comparative summary: 1919 and 1909.....	1682
---	------

MANUFACTURES.

PORTO RICO.

GENERAL STATISTICS.

	Page.
General character of the territory.....	1683
Comparative summary.....	1684
Principal industries, by value of products.....	1684
Persons engaged in manufacturing industries.....	1684
Average number of wage earners for selected industries, with per cent, by sex and age.....	1685
Average number of wage earners, by sex and age, and value of products for cities.....	1685
Wage earners, by months, and for selected industries and for cities.....	1685
Average number of wage earners, by prevailing hours of labor per week.....	1686

	Page.
Size of establishments, by average number of wage earners, for selected industries and for cities.....	1687
Size of establishments, by value of products.....	1687
Size of establishments, by value of products, for selected industries.....	1687
Size of establishments, by value of products, for cities of 10,000 inhabitants or more.....	1688
Character of ownership, for selected industries and for cities.....	1689
Manufactures, by population groups, in cities of 10,000 inhabitants or more.....	1689
Number and horsepower of prime movers.....	1689
Fuel consumed.....	1690

SPECIAL STATISTICS.

Page.

Sugar and molasses.....	1690
Tobacco manufactures.....	1690
Coffee, cleaning and polishing.....	1690
Laundries.....	1691

GENERAL TABLES.

Comparative summary for selected industries and cities: 1919 and 1909.....	1691
Detailed statement of all industries: 1919.....	1692

MINES AND QUARRIES.

Comparative summary: 1919 and 1909.....	1694
---	------

INTRODUCTION AND EXPLANATION OF TERMS.

INTRODUCTION.

The statistics of manufactures for the different states and territories were published as separate bulletins as rapidly as the statistics were compiled. These bulletins are now collected in the present volume forming Volume IX of the reports of the Fourteenth Census. This volume contains the reports for the states and the District of Columbia in alphabetical order, followed by the reports for Alaska, Hawaii, and Porto Rico. Included with the reports for Hawaii and Porto Rico, as separate sections, are the statistics for the quarries in each of those territories for which reports were made (there being no mines reported as such). The figures in this volume in some unimportant details differ from those given in the bulletins, for the reason that certain minor errors discovered in the bulletins as first published have been corrected.

The text of the report for each state summarizes the general results of the census inquiry, presenting a series of special tables in which the most important figures shown in the general tables are given in convenient form for the state or territory as a whole and for important individual industries. It also presents tables in which the statistics for all manufacturing industries combined and for a few important industries

separately are classified by character of ownership, size of establishments, number of wage earners, and prevailing hours of labor, information which could not be presented for every industry without disclosing the operations of individual establishments.

At the end of the report for each state or territory are two general tables, a comparative summary for selected industries, and a detailed statement of all industries combined and specified industries.

The comparative summary gives, for 1919, 1914, and 1909, the number of establishments, average number of wage earners, primary horsepower, wages, cost of materials, and value of products, for selected industries in the state or territory and in cities having 50,000 inhabitants or more; and for cities having from 10,000 to 50,000 inhabitants, similar data for all industries combined.

The detailed statement presents, for 1919, in the state or territory as a whole, and in cities with 50,000 inhabitants or more, statistics in detail for each industry that can be shown without the disclosure of individual operations; and for cities having from 10,000 to 50,000 inhabitants, similar data for all industries combined.

EXPLANATION OF TERMS.

Scope of census.—Census statistics of manufactures are compiled primarily for the purpose of showing the absolute and relative magnitude of the different branches of industry covered and their growth or decline. Incidentally, the effort is made to present data throwing light upon character of ownership, size of establishments, and similar subjects. When use is made of the statistics for these purposes it is imperative that due attention be given to their limitations, particularly in connection with any attempt to derive from them figures purporting to show average wages, cost of production, or profits.

The census did not cover establishments which were idle during the entire year or for which products were valued at less than \$500, or the manufacturing done in educational, eleemosynary, and penal institutions.

Period covered.—The returns relate to the calendar year 1919, or the business year which corresponded most nearly to that calendar year, and cover a year's operations, except for establishments which began or discontinued business during the year.

The establishment.—As a rule, the term "establishment" represents a single plant or factory, but in some

cases it represents two or more plants which were operated under a common ownership or for which one set of books of account was kept. If, however, the plants constituting an establishment as thus defined were not all located within the same city, county, or state, separate reports were secured in order that the figures for each plant might be included in the statistics for the city, county, or state in which it was located. In some instances separate reports were secured for different industries carried on in the same establishment.

Classification by industries.—The establishments were assigned to the several classes of industries according to their products of chief value. The products reported for a given industry may thus, on the one hand, include minor products different from those covered by the class designation, and, on the other hand, may not represent the total product covered by this designation, because some of this class of product may be made in establishments in which it is not the product of chief value.

As a rule, the same designation is used for the industry wherever it appears, although all of the products indicated by this designation were not manufactured in the state or city for which these statistics are pre-

sented. In some instances the wording is changed so as to more correctly describe the products represented. For a number of industries subclasses are shown which indicate more definitely the kind of products.

Selected industries.—The general tables at the end of each state report give the principal facts separately for the industries of the state. A selection has been made of certain leading industries of the state for more detailed consideration. Sometimes an industry of great importance has to be omitted because it comprises so few establishments that a detailed presentation would reveal the operations of individual concerns.

Comparisons with previous censuses.—Owing to changes in industrial conditions it is not always possible to classify establishments by industries in such a way as to permit accurate comparison with preceding censuses. At the census of 1909 the figures for kindred industries were combined. This practice has been followed in compiling the statistics for 1919 and 1914 when placed in comparison with those for 1909 and prior years. The comparative summary for 1919, 1914, and 1909, therefore, does not show separately all the industries given for 1919 in the detailed statement for the state.

Influence of increased prices.—In comparing figures for cost of materials, value of products, and value added by manufacture in 1919 with the corresponding figures for earlier censuses, account should be taken of the general increase in the prices of commodities during recent years. To the extent to which this factor has been influential the figures fail to afford an exact measure of the increase in the volume of business.

Persons engaged in the industry.—The following general classes of persons engaged in the manufacturing industries were distinguished: (1) Proprietors and firm members, (2) salaried officers of corporations, (3) superintendents and managers, (4) clerks (including other subordinate salaried employees), and (5) wage earners. In the reports for the censuses of 1904 and 1899 these five classes were shown according to the three main groups: (1) Proprietors and firm members, (2) salaried officials, clerks, etc., and (3) wage earners. In comparative tables covering the census of 1904 it is of course necessary to group the figures according to the classification that was employed at the earlier censuses.

The number of persons engaged in each industry, segregated by sex, and, in the case of wage earners, also by age (whether under 16 or 16 and over), was reported for a single representative day. The 15th of December was selected as representing for most industries normal conditions of employment, but where this date was not a representative day an earlier date was chosen.

In the case of employees other than wage earners the number thus reported for the representative date

has been treated as equivalent to the average for the year, since the number of employees of this class does not ordinarily vary much from month to month. In the case of wage earners the average has been obtained in the manner explained in the next paragraph.

In addition to the more detailed report by sex and age of the number of wage earners on the representative date, a report was obtained of the number employed on the 15th of each month, by sex, without distinction of age. From these figures the average number of wage earners for the year has been calculated by dividing the sum of the numbers reported for the several months by 12. The importance of the industry as an employer of labor is believed to be more accurately measured by this average than by the number employed at any one time or on a given day.

The number of wage earners reported for the representative day, though given in certain tables for each separate industry, is not totaled for all industries combined for any state, because, in view of the variations of date, such a total is not believed to be significant. It would involve more or less duplication of persons working in different industries at different times, would not represent the total number employed in all industries at any one time, and would give an undue weight to seasonal industries as compared with industries in continual operation. This total, however, is shown for the different cities, because the limited area and greater regularity of employment largely overcame the objection incident to its publication for the separate states or the United States.

In order to determine as nearly as possible the age distribution of the average number of wage earners for a given state as a whole, the per cent distribution by age of the wage earners in each industry for December 15, or the nearest representative day, has been calculated from the actual numbers reported for that date. The percentages thus obtained have been applied to the average number of wage earners for the year in that industry to determine the average numbers 16 years and over and under 16, employed. These calculated averages for the several industries have been added to give the average distribution for each state as a whole and for the entire country.

Salaries and wages.—Under these heads are given the total payments during the year for salaries and wages, respectively. The Census Bureau has not undertaken to calculate the average annual earnings of either salaried employees or wage earners. Such averages would possess little real value, because they would be based on the earnings of employees of both sexes, of all ages, and of widely varying degrees of skill. Furthermore, so far as wage earners are concerned, it would be impossible to calculate accurately even so simple an average as this, since the number

of wage earners fluctuates from month to month in every industry, and in some cases to a very great extent. The Census Bureau's figures for wage earners, as already explained, are averages based on the number employed on the 15th of each month, and while representing the number according to the pay rolls to whom wages were paid on that date, no doubt represent a larger number than would be required to perform the work in any industry if all were continuously employed during the year.

Prevailing hours of labor.—No attempt was made to ascertain the number of wage earners working a given number of hours per week. The inquiry called merely for the prevailing practice followed in each establishment. Occasional variations in hours in an establishment from one part of the year to another were disregarded, and no attention was paid to the fact that a few wage earners might have hours differing from those of the majority. All the wage earners of each establishment are therefore counted in the class within which the establishment itself falls. In most establishments, however, practically all the wage earners work the same number of hours, so that the figures give a substantially correct representation of the hours of labor.

Capital.—The instructions on the schedule for securing data relating to capital were as follows:

"The answer should show the total amount of capital, both owned and borrowed, on the last day of the business year reported. All the items of fixed and live capital may be taken at the amounts carried on the books. If land or buildings are rented, that fact should be stated and no value given. If a part of the land or buildings is owned, the remainder being rented, that fact should be so stated and only the value of the owned property given. Do not include securities and loans representing investments in other enterprises."

These instructions were identical with those employed at the censuses of 1914 and 1909. The data compiled in respect to capital, however, at both censuses, as well as at all preceding censuses of manufactures, have been so defective as to be of little value except as indicating very general conditions. In fact, it has been repeatedly recommended by the census authorities that this inquiry be omitted from the schedule. While there are some establishments whose accounting systems are such that an accurate return for capital could be made, this is not true of the great majority, and the figures therefore do not show the actual amount of capital invested.

Materials.—The statistics as to cost of materials relate to the materials used during the year, which may be more or less than the materials purchased during the year. The term "materials" covers fuel, rent of power and heat, mill supplies, and containers, as

well as materials which form a constituent part of the product.

Rent and taxes.—The taxes include certain Federal taxes and state, county, and local taxes. Under "Federal taxes" there are included the internal revenue tax on manufactures (tobacco, beverages, etc.), excise taxes when included in values reported for products, corporation capital stock tax, and corporation income tax, but not the income tax for individuals and partners.

Value of products.—The amounts given under this heading represent the selling value or price at the factory of all products manufactured during the year, which may differ from the value of the products sold.

Value added by manufacture.—The value of products is not always a satisfactory measure of either the absolute or the relative importance of a given industry, because only a part of this value is actually created by the manufacturing processes carried on in the industry itself. Another part, and often by far the larger one, represents the value of the materials used. For many purposes, therefore, the best measure of the importance of an industry, from a manufacturing standpoint, is the value created by the manufacturing operations carried on within the industry. This value is calculated by deducting the cost of the materials used from the value of the products. The figure thus obtained is termed in the census reports "value added by manufacture."

Cost of manufacture and profits.—The census data do not show the entire cost of manufacture, and consequently can not be used for the calculation of profits. No account has been taken of depreciation or interest, rent of offices and buildings other than factory or works, insurance, ordinary repairs, advertising, and other sundry expenses.

Primary horsepower.—This item represents the total primary power generated by the manufacturing establishments plus the amount of power, principally electric, rented from other concerns. It does not cover the power of electric motors taking their current from dynamos driven by primary power machines operated by the same establishment, because the inclusion of such power would obviously result in duplication. The figures for primary horsepower represent the rated capacity of the engines, motors, etc., and not the amount of power in actual daily use.

Fuel.—Statistics of the quantity of fuel used are shown only for anthracite and bituminous coal, coke, fuel oils, gasoline and other volatile oils, and gas—natural and manufactured, and represent the quantity used during the year. As only the principal kinds of fuel are shown, comparison as to the total cost of all fuel is impracticable. A comparison, however, of the total quantities of the several kinds of fuel used in 1919 and 1914 is given.

Location of establishments.—The Census Bureau has classified establishments by their location in cities. In interpreting these figures due consideration should be given to the fact that establishments are often located just outside the boundaries of cities, and are necessarily so classified, though locally they are looked upon as constituting a part of the manufacturing interests of the city.

Laundries.—The censuses of 1919 and 1909 were the only manufacturing canvasses to include statistics of power laundries. The data are presented separately

and are not included in the general total for manufacturing industries, since their inclusion would interfere with comparisons with other censuses.

Custom sawmills and gristmills.—In order to make the statistics for 1919 comparable with those for 1914, the data for these mills have been excluded from all the tables presenting general statistics. Data for such establishments are given in a separate table at the end of the special statistics for each state and territory, so far as this can be done without disclosing the operations of individual establishments.